

fibers formed of woven and knitted fiber networks consisting of nylon and metal. This rejection is respectfully traversed.

Flick discloses a wrap having a *layer* of metallized fabric made up of nylon coated with metal. The metallized layer is surrounded by *layers* of non-conductive fabric (see Fig. 9 and the description thereof at column 4, lines 51-65). The present invention, on the other hand, is comprised of a single fabric made from individually conductive fibers and optionally with other non-conductive fibers. The fabric of the present invention does not consist of placing a conductive layer beneath a non-conductive layer. Rather, it is the same single fabric.

Moreover, in Fig. 8 of Flick, the three pieces are assembled, as evidenced by the seam lines (dotted lines). Thus, electrodes 81 and 82 are bridged through the fabric 83. Flick requires this combination in order for the invention to work. On the other hand, the sensor of the present invention may be used independently or may be plugged into the Wearable Motherboard (see U.S. Patent No. 6,381,482).

The conductive fabric disclosed in Flick is prepared by weaving the nylon yarns together and then coating the yarns with conductive material *after the fabric has been formed from the yarns*. In contrast thereto, the fabric of the present invention is formed from weaving or knitting the individual fibers having conductive properties. The difference is that Flick's fibers are not conductive until after weaving and coating, while the fibers used to form the fabric of the present invention are conductive prior to and after formation of the fabric. Because the fabric used in Flick differs in structure from the fabric of the present invention, the claims cannot be anticipated by the Flick reference.

The Examiner rejected claims 2, 4, 6, 8, 10, and 12 under 35 USC 103(a) as being obvious in light of Flick. The Examiner asserts that the Flick reference discloses all that is claimed except the disclosure of using a conductive paste between the fiber and the data output lead. Further, the Examiner notes that the use of conductive paste is known to increase signal quality and conduction by reducing contact impedance between elements, thus making its use obvious from the teachings of Flick. Applicants respectfully traverse.

As noted above, the Flick reference discloses a fabric having a significant structural difference from the invention. While the present invention provides a single fabric of electrically conductive fibers, optionally integrated with non-conductive yarns, the Flick reference provides layers of conductive fabric surrounded by non-conductive fabric. Because the fabrics differ

structurally, the rejection cannot stand. Accordingly, Applicants respectfully request withdrawal of the rejection.

Applicants note that this application is related to the following co-pending applications. All of the applications claim priority to the same ultimate parent application:

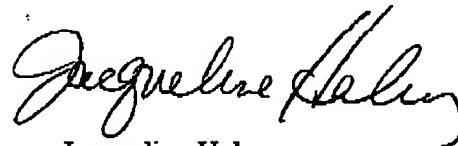
U.S.S.N. 09/610,929, filed on July 6, 2000;

U.S.S.N. 09/713,160, filed on November 14, 2000;

U.S.S.N. 09/713,147, filed on November 14, 2000.

In light of the amendments to the claims and the remarks presented herein, Applicants respectfully request allowance of all pending claims.

Respectfully submitted,

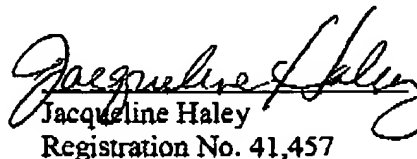


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I certify that this Amendment and Response to Office Action is being transmitted to the U.S. Patent and Trademark Office via facsimile on the date provided below.



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Date: April 30, 2002

Marked Up Copy of Amended Claims

1. (Amended) A fabric-based sensor for transmitting electrical impulses or other vital signs comprising:

(a) a fully-conductive fabric [layer] of one or more integrated individually conductive fibers; and

(b) an electrical lead for connection to a data-output terminal, the electrical lead comprising one of the integrated [fully-conductive] individually conductive fibers.

3. (Amended) The fabric-based sensor of claim 1, wherein the individually conductive [fully-conductive layer of] fibers of the fabric are knitted.

4. (Amended) The fabric-based sensor of claim 2, wherein the individually conductive [fully-conductive layer of] fibers of the fabric are woven.

U.S.S.N.: 09/13,161

Filed: November 14, 2000

Amendment and Response to Office Action

Complete Copy of Amended Paragraph

This application is a continuation-in-part of U.S.S.N. 09/157,607, filed on September 21, 1998, now U.S. Patent No. 6,145,551, and is a continuation-in-part of U.S.S.N. 09/273,175, filed on March 19, 1999, now U.S. Patent No. 6,381,482.